

## WHALEBACKS IN THE RAPIDS

JOSEPH L. COLBY, CHARLES W. WETMORE and THE BARGE 110

by Ronald F. Beaupre with the Editor

It was 100 years ago that a sensational event took place on the St. Lawrence River. Two newly-built whaleback steamers and a whaleback barge were bound from the Head of the Lakes to the open sea, and their designer and builder, Alexander McDougall, was determined to get them there safely even though they were too big to pass through the small locks of the old St. Lawrence Canals.

McDougall, after careful consideration, had decided to gamble on the chance that his whalebacks would handle well enough that they could make the passage to salt water by shooting down through the St. Lawrence River rapids. Although this feat was accomplished daily by the shallow-draft, sidewheel-driven passenger steamers of the day, it never had been attempted by a propeller-driven ship, or by any vessel of the size of the steamers JOSEPH L. COLBY and CHARLES W. WETMORE, or the barge 110.

Perhaps we should now digress a bit to see how it developed that Alexander McDougall would decide that the dangerous shooting of the rapids with three brand-new ships was worth the risk. McDougall's shipyard, the American Steel Barge Company, which first operated at Duluth, Minnesota, and then, starting in 1890, at West Superior, Wisconsin, was in a constant state of activity, turning out more and more ships built to McDougall's radical and innovative design. One barge, 101, was launched in 1888; two barges, 102 and 103, were launched in 1889; and in 1890, the yard put into the water the barges 104, 105, 107 and 109, and the steamers COLGATE HOYT (Hull 106) and JOSEPH L. COLBY (Hull 108). In the spring of 1891, three more whalebacks were launched, the barges 110 and 111 in a twin ceremony on April 28th, and the steamer CHARLES W. WETMORE (Hull 112) on May 23rd. (It should be noted that most of the whalebacks were built with consecutive hull numbers; the steamers normally were given names, while all but one of the barges were christened with their hull numbers as their names.)

Business conditions, however, could not justify the tremendous investment made by the backers of the American Steel Barge Company. A severe recession had begun to affect the commerce of the Great Lakes area during 1890, and freight rates dropped. As a result of the fact that American Steel Barge was not only the builder of the whalebacks but also their first owner/operator, the company was left with an extremely narrow profit margin. In this same period, lake shipyards launched a total of 236 new hulls, aggregating some 170,870 Gross Tons (U.S.), which was their largest output of new construction in any period on the lakes to date.

Alexander McDougall began to search for new trades for his rapidly-growing fleet of whalebacks, and at the same time for a method of advertising to all the world how well his novel design of vessel could perform. With far more tonnage available than lake shipping routes could then support, McDougall's only alternative was to send some of the ships out to run on the high seas.

This decision was adventuresome in the extreme, but not, perhaps, very wise based on past performance. McDougall had great faith in his ships, but the crews of the whalebacks knew exactly how their boats performed. Their decks were extremely wet in any kind of sea, and it was difficult for the men to move fore and aft along the deck as there was no inside tunnel. The hulls, with their elliptical or conoidal ends and flat bottoms, pounded unmercifully when the ships were running light. The quarters of the deck crew were located in the hull forward and were beyond belief in the summer heat. And the flush design of the hatches made loading cargo or bunker coal an extremely messy process, with any spillage lost over the side.

The original McDougall whaleback designs were for barges, but it did not take the inventor long to conclude that he should build some steamers to tow